Please replace the paragraph bridging pages 3 and 4, beginning at page 3, line 28, with the following rewritten paragraph:

--In the present invention, a cobalt film 6 is formed over the entire surface of a semiconductor substrate 1, onto which a transistor is formed, as shown in Fig. 1 (b) (Step S1). This film is grown at a temperature of 200 to 500°C, using a magnetron sputtering method. Next, this is heat treated for 30 seconds in an inert gas atmosphere, such as nitrogen, at a temperature of 500°C or higher, so as to form a dicobalt silicide film (Co_2Si) , a cobalt monosilicide film (CoSi), and a cobalt disilicide film ($CoSi_2$) thereon (First sinter) (Step S2) . When this is done, the cobalt silicide film 10, as shown in Fig. 1 (c), is formed in self-aligned manner over only the gate electrode 5 and the diffusion layers 3 and 4. Then the semiconductor substrate 1 is immersed in an admixture solution made of hydrochloric acid, hydrogen peroxide, and water (HPM) , so as to perform selective etching, thereby removing unreacted or partially oxidized cobalt from the top of the field oxide film 2 and the side wall film formed on the semiconductor substrate 1 (Fig. 1(d)) . When performing this process of etching away excess cobalt, because to avoid excessive etching of the silicide film on the gate electrode 5 surface, source and drain regions 3 and 4, it is necessary to optimize the etching conditions, so that the concentration ratios of the hydrochloric acid, hydrogen peroxide, and water are set in the range from 1:1:5 to 3:1:5, the HPM solution temperature is made 25 to 45°C, and the etching time is made 1 to 20 minutes (Step S3) . Next, heat treating at a temperature higher than the first sintering is done, for example, at 800°C for 10 seconds (Fig. 1 (e)) . As a result, a uniform, low-resistivity cobalt disilicide ($CoSi_2$) 11 is formed (Second sinter) (Step S4).--

Please replace the paragraph bridging pages 5 and 6, beginning at page 5, line 19, with

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the following rewritten paragraph:

--To solve the above-described problem, in a process step for removing unreacted cobalt or a cobalt oxide, it is necessary to reduce the etching rate or to avoid immersion in the etching solution for an excessively long time, thereby only the unreacted cobalt or partially oxidized cobalt film is removed, without influencing the silicide film. In an experiment with the present invention, it was found that the optimum etching is done with an admixture solution made of a hydrochloric acid, hydrogen peroxide, water, the admixture solution having relative concentration ratio ranging from 1:1:5 to 3:1:5, at a solution temperature of 25 to 45°C, with an etching time of 1 to 20 minutes. For example, if etching is done with an etching solution temperature of 35°C for an etching time of 3 minutes, only the unreacted cobalt and cobalt oxide are etched, with absolutely no etching of the silicide layer (Fig. 2 (c)) . After this, by performing a second sintering, a uniform, low-resistivity cobalt silicide ($CoSi_2$) film 11 is formed. The occurrence of failures was found to be highly dependent on the concentration and temperature of the etching solution, and the etching time.--

Please replace the paragraph bridging pages 6 and 7, beginning at page 6, line 21, with the following rewritten paragraph:

--First, a cobalt film 6 is formed over the entire surface of a semiconductor substrate 1, onto which a transistor is formed, as shown in Fig. 3 (b) . After the cobalt film 6 is formed, a titanium (Ti) or titanium nitride (TiN) film 7 is formed so as to cover the cobalt film 6 and prevent the oxidation thereof (Fig. 3 (c)) . The method of forming these films is either a magnetron sputtering method or vapor deposition. In this condition, heat treating is done in an inert gas atmosphere for 10 to 60 seconds at a temperature of 500°C or higher, so as to form a

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dicobalt silicide film, a cobalt monosilicide film, or a cobalt disilicide film (First sintering) . When this is done, the cobalt silicide film 10 is formed in self-aligning manner over only the gate electrode 5 and the diffusion layers 3 and 4 (Fig. 4 (a)). Next, in order to remove the titanium or titanium nitride film 7 formed as a cap film to prevent oxidation of the cobalt film 6, the silicon substrate 1 is immersed in an admixture solution made of ammonia, hydrogen peroxide, and water (APM) (Fig. 4 (b)). After this is done, the silicon substrate 1 is immersed in an admixture solution of hydrochloric acid, hydrogen peroxide, and water (HPM) , so as to remove only the unreacted cobalt or partially oxidized cobalt from the field oxide film 2 and the side wall film 12 by selective etching (Fig. 4 (c)). When this is done, in order to avoid etching of the silicide film formed on the source and drain regions 3 and 4 and the gate electrode 5 by excessive etching, the etching conditions used are a relative concentration ratio of hydrochloric acid, hydrogen peroxide, and water in the range from 1:1:5 to 3:1:5, an HPM solution temperature in the range from 25 to 45°C, and an etching time of 1 to 20 minutes. Next, heat treating is done for 10 to 60 seconds at a temperature higher than that of the first sintering (Fig. 4 (d)) . As a result, a uniform, low-resistivity cobalt disilicide film 11 is formed.--

IN THE DRAWINGS:

Please amend FIG. 5 of the drawings as shown in red in the attached copy of the drawing.

IN THE CLAIMS:

Please amend claim 1 to read as follows:

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1. (Amended) A method for forming a metal silicide layer in a self-aligned manner on a source region, a drain region and a gate electrode of a semiconductor device formed on a semiconductor substrate, said method comprising the steps of: